

Title (en)
Rotational angle detecting device, torque detecting device and steering apparatus

Title (de)
Rotationswinkeldetektor, Drehmomentdetektor und Lenkvorrichtung

Title (fr)
Détecteur d'angle de rotation, détecteur de couple et dispositif de direction

Publication
EP 1293752 A1 20030319 (EN)

Application
EP 02020355 A 20020912

Priority
JP 2001280374 A 20010914

Abstract (en)
The difference between the maximum value and minimum value of an output of each of magnetic sensors, which was outputted during the passage of one target, is calculated, and gain is corrected based on the calculated difference. An average value of the maximum value and minimum value is calculated, and offset is corrected based on the calculated average value. Accordingly, it is possible to realize a rotational angle detecting device, a torque detecting device and a steering apparatus, capable of accurately detecting a rotational angle and rotational torque without being affected by the difference in the output characteristics of the magnetic sensors and the change in the air gaps between the targets and the respective magnetic sensors. <IMAGE>

IPC 1-7
G01B 7/30

IPC 8 full level
B62D 5/04 (2006.01); **B62D 5/06** (2006.01); **B62D 6/10** (2006.01); **B62D 15/02** (2006.01); **G01B 7/00** (2006.01); **G01B 7/30** (2006.01); **G01D 5/18** (2006.01); **G01L 3/10** (2006.01); **G01L 5/22** (2006.01)

CPC (source: EP)
B62D 6/10 (2013.01); **B62D 15/0215** (2013.01); **G01L 3/101** (2013.01); **G01L 5/221** (2013.01)

Citation (search report)
• [XA] US 5239490 A 19930824 - MASAKI RYOSO [JP], et al
• [DXA] EP 1087218 A1 20010328 - KOYO SEIKO CO [JP]

Cited by
EP1295780A3; EP1752361A1; EP1826906A3; CN112304210A; DE102004024398A1; DE102004024398B4; EP1364860A3; US10161762B2; DE102014114135B4; US7203618B2; US6948385B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1293752 A1 20030319; JP 2003083823 A 20030319

DOCDB simple family (application)
EP 02020355 A 20020912; JP 2001280374 A 20010914